

```
CLACKAMAS
AREA
T A Z
/ N /
S D X
USERS
```

COMPUTING THE FUTURE--  
IN CLACKAMAS COUNTY

As for our last meeting, it was held on: SEPT. 9, 1983 at: 7:00 PM in: RM 142, CLAIRMONT HALL on the CCC campus. There was a real good turnout but we hope to see even bigger numbers in the future. We wish to extend a warm welcome to our three new paid-up members. They are:

DONALD BECK, VINCENT LYON  
and DAVID NORDENGREN.

Lets really make them feel at home with us.

Two members, ROD GOWEN and DICK WAGNER, brought their modified ZX/TS COMPUTERS to the meeting and had them set up to demo hardware and software items. We hope that some of you got some help and information you could make good use of. There will be more information on these and other items in this and future issues of your newsletter--  
WATCH FOR THEM...

There was a short, but, we hope an informative discussion on the new TS 2068, by the members who had seen and tried one.

One topic brought up for our discussion, was the idea of the creation of some sort of club Pin with an appropriate logo or emblem. At a future time we may also wish to produce a patch to match. Some concepts were discussed and KEVIN FOWLER promised to bring with him to our next meeting, some samples for our inspection.

The next meeting of CAT/S will be held:

on: FRIDAY, OCTOBER 14  
at: 7:00 P.M.  
in: RM 142, CLAIRMONT HALL  
CLACKMAS COMM. COLLEGE

We will also be keeping you informed as to time and place of PATS next meeting:

on: SATURDAY, OCTOBER 8  
at: 1:00 P.M.  
in: RM B15, SCI AND TECH  
PCC SYLVANIA CAMPUS



Use the POWER  
within your reach!

## BITS and BYTES

NOTE:--There will be a slight change as to the date of our NOVEMBER meeting. Because of VETERANS DAY, it will be held on THURSDAY the 10th, instead of FRIDAY, the 11th.

RUSSELL MEADE, our area rep for TIMEX, will be moving from TACOMA, WA., to PORTLAND in the near future. We hope to have him speak at a meeting as soon as he can arrange his schedule. We will be looking forward to hearing what he may have to say as to future Plans by TIMEX. Any news we get from him in the meantime will be brought to you as soon as possible.

Our Program listing this month was submitted by DICK WAGNER, as was our Product hardware review on the REVERSE VIDEO BOARD.

If you know of any ZX/TS owners who are not members of any group, and might enjoy and/or get something out of our group, please invite them to a meeting to share in our experiences and knowledge (such as it is). The experience will not cost them anything except a couple of hours of their time.

We now have four (4) tapes in the club library and there will soon be more. Look for them at the meeting. If any of you have a Program that you wish to share with the club, or if you have a review or short Program or routine to share, please contact either:

ROD GOWEN 655-7484 or  
DENNIS JURRIES 655-9670

## HARDWARE REVIEW

### REVERSE VIDEO by DICK WAGNER

My REVERSE VIDEO installation seemed to be of interest to members at the SEPTEMBER meeting. It was purchased from:

COTTAGE TECHNOLOGY  
5720 W. LITTLE YORK  
SUITE 178  
HOUSTON, TX 77091

The Price was \$8.95 Plus \$1.00 Postage and handling for each item ordered. Our group now has a discount coupon for a 10 Percent reduction which means that on a group order we could save enough to pay the Postage.

The module measures 3/4in. X 5/8in. X 1/4in., and requires only four (4) wires to be soldered in and one (1) trace to be cut. Good documentation is provided. The case back is removed (5 screws) and one trace is cut to disengage normal video mode. The circuit board need not be removed from the upper case. Tho not mentioned in the instructions, a SPST (single-Pole-single-throw) switch can be installed across the cut trace to allow switching from normal to reverse video mode. Use RADIO SHACK no. 275-624 toggle switch at \$1.49 or no. 275-406 slide switch at 2/\$.69. The smallest switch possible is required to fit into the case top.

For the timid or inexperienced User Group members, I will install the unit and toggle switch at no charge. (You must supply the parts). However, as the slide switch is more difficult to install, I will have to charge \$1.50 for the extra work.

BE AWARE--for new computers, any such changes will void the warrantee, so if you are interested, buy the unit now and install it as soon as the factory warrantee is off.

### ZX/TS P and R (Programs and Routines)

Ever wonder how to round off that number in a routine that came out to 6 decimal places? Here is the formula to use in your program to do the job of rounding off to 2 places:

```
LET R=INT(100*N+0.05)/100
```

N= number to be rounded off.  
R= number after rounding off.

Hope you can make use of this little tip. We will try to have a usefull, one line routine in each issue. If you have one to share with us, please submit it for future publication.

As this is our monthly column to spotlight a short program submitted by one of our members and of general interest, we would like to have more of you submitting material.

Here is this month's program, submitted by: DICK WAGNER, who also gave us this month's hardware review. He and we hope you enjoy both.

UNTIL NEXT TIME--

keep on

POKEing and PEEKing>>>

THIS LITTLE GRAPHIC PROGRAM WILL FIT IN WITH THE GRAPHICS DENNIS IS PLANNING. IT USES THE SAME PROGRAM PART FOR THE MOVING DISPLAY. MY 10 YEAR OLD GRANDSON GETS A KICK OUT OF THIS TYPE OF GRAPHICS. THE TRICK IS TO PLACE THE INVERSE GRAPHIC MESSAGE JUST RIGHT TO MAKE IT LOOK LIKE EXHAUST FROM THE SNOWCAT. IT TOOK A LITTLE ADJUSTING FOR THE CORRECT "PRINT AT" LOCATION SO MY PROGRAM SHOULD BE FOLLOWED CLOSELY. THE REM STATEMENTS IN LINES 5 AND 6 GIVE THE SHIFTED KEYS TO USE IN CASE THE FINAL PRINT IS NOT TOO CLEAR. I HAVE NOT FOUND A WAY TO MAKE A GRAPHICS FIGURE MOVE AS AN ENTIRE UNIT SO I USED A FIXED FIGURE.

HAPPY BIRTHDAY



```
1 REM I USED A SCROLLING MESSAGE LIKE "HAPPY BIRTHDAY" TO MAKE A GOOD SHOWING TYPE RIGHT TO THE END OF EACH LINE, NO EXTRA SPACES.
2 REM LINES 60 THRU 100 PROVIDES THE SCROLL TO BE ON LINE WITH THE SMOKE FROM THE EXHAUST AND STARTING AT THE CORRECT POINT.
5 REM GRAPHIC CHARACTERS ARE SHIFTED 9 AND SHIFTED NUMBERS/LETTERS IN THIS ORDER: D S 3 5 6 6 6 5 2 SPACE 8 2 1 G G G G G G G
6 REM (CONT) T T 2 D G D D D
32 IN LINE 55 USE THE LETTER H 32 TIMES. DONT COUNT, JUST STOP WHEN THE CHARACTER END LINES UP WITH THE START.
8 PRINT " INPUT MESSAGE WHEN PROMPTED BY "L"
9 PAUSE 100
10 CLS
12 PRINT AT 8,16;" "
15 PRINT AT 9,17;" "
20 PRINT AT 9,18;" "
25 PRINT AT 10,16;" "
30 PRINT AT 10,15;" "; AT 10,15;" "; AT 10,17;" "
35 PRINT AT 11,15;" "; AT 11,17;" "; AT 11,18;" "; AT 11,19;" "
40 PRINT AT 12,12;" "; AT 12,20;" "
45 PRINT AT 12,13;" "; AT 13,12;" "
50 PRINT AT 14,12;" "; AT 14,13;" "; AT 14,14;" "; AT 14,15;" "; AT 14,18;" "; AT 14,19;" "; AT 14,20;" "
55 PRINT AT 15,0;" "
60 INPUT A$
70 LET A$=" "+A$
80 PRINT AT 8,0;A$( TO 16)
90 LET A$=A$(2 TO LEN A$)+A$(1
100 GOTO 60
```



# SPECIAL NOTE

For all of you who have asked here is a copy of the complete roster of our membership. As the group grows, we will put out a new list from time to time. WATCH US GROW\*\*

2  
BACKSTRAND, JOHN  
19911 S. HENRICI 503-631-2065  
OREGON CITY 1 OR. 97045

3  
EVANS, BOB  
2615 SE COURTNEY 19 503-659-9207  
MILWAUKIE 1 OR. 97222

4  
RIPPEY, QUINTEN  
1601 S BEAVERCREEK 503-632-4876  
OREGON CITY 1 OR. 97045

5  
MARKHAM, WAYNE  
19751 S. MEYERS RD. 503-655-5066  
OREGON CITY 1 OR. 97045

6  
BATE, DAVID  
21912 S FARMPOUND CT 503-632-4147  
OREGON CITY 1 OR. 97045

7  
PAUL, DON (SEC./TREAS.)  
13080 CLIFFSIDE DR. 503-632-4263  
MILINO 1 OR. 97042

8  
SIMPSON, MICHAEL P.  
274 S.W. 9TH ST. 503-266-5305  
CANBY 1 OR. 97013

9  
WAGNER, DICK  
655 NW TERRITORIAL 503-266-4712  
CANBY 1 OR. 97013

10  
MCLEOD, CHAD  
1016 HAZELWOOD DR 503-656-4650  
OREGON CITY 1 OR. 97045

11  
MOORE, GARY  
600 MAY ST. NO. 46 503-657-7295  
OREGON CITY 1 OR. 97045

10  
MCLEOD, CHAD  
1016 HAZELWOOD DR 503-656-4650  
OREGON CITY 1 OR. 97045

11  
MOORE, GARY  
600 MAY ST. NO. 46 503-657-7295  
OREGON CITY 1 OR. 97045

12  
JURRIES, DENNIS (CHAIRMAN)  
1103 HUGHES ST. 503-655-9670  
OREGON CITY 1 OR. 97045

13  
GOWEN, ROD  
1419.5 7TH ST. 503-655-7484  
OREGON CITY 1 OR. 97045

22  
FOWLER, KEVIN  
6852 NE MULTNOMAH 503-253-0844  
PORTLAND 1 OR. 97213

28  
SCHMIDT, DONALD  
11251 S PARKLAND CT 503-655-0851  
OREGON CITY 1 OR. 97045

29  
ELSMORE, RON  
3401 SE. RISLEY 19 503-659-9421  
MILWAUKIE 1 OR. 97222

30  
MARTIN, BILL  
15150 SE. ANDERSON 503-658-3560  
CLACKAMAS 1 OR. 97015

34  
LYON, VINCENT  
7420 SE WOODSTOCK 503-771-8564  
PORTLAND 1 OR. 97206

35  
BECK, DONALD  
571 D STREET 503-657-1827  
OREGON CITY, 1 OR. 97045

36  
NORDENGREN, DAVID  
25800 SE EAGLE CR H 503-637-6326  
EAGLE CREEK, 1 OR. 97022